

the mercury completely filled it; placed a cup over the cap and inverted the tube and placed it in a permanent position; it is observed for monthly maximum and minimum and monthly range. Made several trips to the ocean steamers, comparing the mean range with first-class aneroid. Mr. Chamberlain, at the same time, leveled over the railroad to my office; resulting altitude 99 feet, and adding 3 for the height of the cistern gives 102 feet above the level of the lake. The latter level varies; the canal company assigns 105 feet, but they measured in the dry season; 210 feet is the approximate altitude of my barometer cistern above sea level. On the 18th of May, 1896, the lake was 8.5 feet below the high water of 1895. I formerly used 200 feet as the altitude, but will adopt your correction and, thereby, obtain the sea-level pressure of 29.80 for May 19, 1896. The local pressure on May 16 was exactly normal, according to my scale; for the first fourteen days of the month it was below normal and unusual. In April it was above normal. The range during the month rarely exceeds 0.11. My former observations were made at Granada and were sent to the Smithsonian Institution. The barometer at Granada College is about 180 feet above sea level, but the reported readings are not corrected for this. Until lately I was the only one who measured rainfall in this region.

#### OBSERVATIONS AT HONOLULU, REPUBLIC OF HAWAII.

Through the kind cooperation of Mr. Curtis J. Lyons, Meteorologist to the Government Survey, a copy of the daily record at Honolulu is communicated to the Weather Bureau in advance of its official publication, and is herewith printed, as a special contribution, for the convenience of those who are studying the relations of the storms and weather of the United States to those of adjacent countries, with a view to long-range, seasonal predictions.

*Meteorological observations at Honolulu, Republic of Hawaii.*

MAY, 1898.

May, 1898.	Pressure at sea level.			Temperature.					Relative humidity.			Wind.*		Cloudiness.	Rain measured at 6 a. m.
	7 a. m.	3 p. m.	9 p. m.	6 a. m.	2 p. m.	9 p. m.	Maximum.	Minimum.	7 a. m.	2 p. m.	9 p.m.	Direction.	Force.		
1	30.04	30.00	30.07	64	77	70	81	63	78	65	77	nne.	2	4	0.00
2	30.09	30.04	30.12	67	76	70	79	65	73	66	82	nne.	3	2-5	0.00
3	30.11	30.04	30.12	70	78	73	79	68	80	63	74	ene.	4	7	0.06
4	30.10	30.03	30.09	72	77	73	79	71	70	63	74	ene.	3	9	0.02
5	30.05	30.02	30.10	72	77	72	78	71	74	61	77	ene.	4	9-6	0.01
6	30.06	30.03	30.10	71	78	73	79	69	82	59	70	ene-ne.	2-4	9-3	0.11
7	30.11	30.07	30.15	73	78	71	79	71	74	63	77	ne.	4	4	0.01
8	30.11	30.05	30.10	70	78	72	79	69	81	53	69	nne.	3	3	0.03
9	30.08	30.02	30.08	70	75	73	78	68	81	70	68	ne.	4	5	0.03
10	30.08	30.00	30.10	71	77	72	80	70	70	56	73	nne.	4	3-1	0.07
11	30.12	30.07	30.14	70	76	73	78	68	73	60	70	ne.	4	4	0.03
12	30.19	30.15	30.19	71	77	72	79	70	81	60	69	ne.	4	3-7	0.03
13	30.15	30.07	30.12	71	77	71	79	69	81	56	69	ne.	4-5	3-1	0.00
14	30.08	30.00	30.06	70	78	70	79	69	83	73	ne.	3-0	3-1	0.00	
15	30.02	30.00	30.06	67	78	71	79	63	83	77	ne-n.	3	5-3	0.06	
16	30.10	30.08	30.15	70	77	73	78	68	83	74	ne.	3	3-3	0.20	
17	30.16	30.16	30.22	71	76	74	77	71	73	63	74	ene.	3-5	10	0.24
18	30.11	30.08	30.13	72	77	74	79	72	73	63	76	nne n.	6-4	9	0.01
19	30.13	30.11	30.15	72	77	73	77	72	67	63	74	ene.	4-5	10-5	0.00
20	30.15	30.13	30.19	71	75	73	79	68	72	66	74	nne.	3-4	8-10	0.02
21	30.17	30.16	30.21	71	75	73	77	71	66	68	67	ene.	3-4	7-10	0.00
22	30.11	30.10	30.14	71	78	73	79	70	66	58	69	ne.	3-2	5-10	0.00
23	30.11	30.06	30.13	69	79	72	81	68	67	53	77	ne.	1	1	0.00
24	30.10	30.05	30.13	71	79	73	81	69	74	58	74	ne.	2	5	0.00
25	30.12	30.09	30.15	68	77	72	80	67	86	67	80	ne.	3	6	0.08
26	30.15	30.10	30.15	69	76	74	80	68	77	70	77	ne.	3	5	0.12
27	30.14	30.06	30.13	71	79	74	81	67	70	60	74	ne.	3-5	0.00	0.00
28	30.12	30.09	30.15	70	79	74	80	69	80	60	70	ne.	3	5	0.06
29	30.15	30.13	30.18	71	79	74	80	70	86	60	74	ne.	4	5	0.04
30	30.16	30.13	30.16	72	79	74	80	70	77	64	74	ne.	4	6	0.07
31	30.15	30.04	30.07	73	78	73	80	70	70	64	75	ne.	3	5	0.04
	30.11	30.07	30.13	70.6	77.3	72.5	79.2	68.8	81.6	73.6					1.35

The station is at 21° 18' N., 157° 50' W.; altitude 50 feet.

Pressure is corrected for temperature and reduced to sea level, but the gravity correction, -0.06, is still to be applied.

The average direction and force of the wind and the average cloudiness for the whole day are given unless they have varied more than usual, in which case the

extremes are given. The scale of wind force is 0 to 10. Two directions of wind, or values of wind force, connected by a dash, indicate change from one to the other.

The rainfall for twenty-four hours is given as measured at 6 a. m. on the respective dates.

\* Average wind for the day.

This record for May is signed by Emma C. Lyons.

#### OBSERVATIONS AT PORT AU PRINCE, HAITI.

Through the kind cooperation of Prof. T. Scherer of Port au Prince, Haiti, the meteorological observations taken by him at 7 a. m., local time, or 11:49 a. m., Greenwich time, are communicated in manuscript for early publication in the MONTHLY WEATHER REVIEW. By entering these on the monthly and annual charts, published by the Weather Bureau, we obtain an important extension southeastward of our field of study. The observations are taken 1<sup>h</sup> 11<sup>m</sup> earlier than those of the Weather Bureau telegraph system. The original reports are in metric measures; the conversions are by the Editor.

The barometer is 119 feet above sea level; its readings have been corrected by Professor Scherer for temperature and elevation, but not for gravity, this latter correction is -0.064 inch; the thermometers are 6.7 feet above ground; the rain gauge, 7.2 feet above ground. The wind velocity is given in miles per hour.

The position of Port au Prince, Haiti, is latitude 18° 34' N., longitude 72° 21' W., or 4<sup>h</sup> 49<sup>m</sup> west of Greenwich. Additional records for this station are published in the annual volume of the Central Meteorological Institute at Vienna.

*Observations at Port au Prince, Haiti.*

MAY, 1898.

Date.	Barometer reduced.	Temperature.		Rel. humidity.	Wind.		Clouds.		Preceding 24 hours.		
		Air.	Dew-point.		Direction.	Velocity.	Kind.	Amount.	Direction.	Total rain.	Temperature.
											Max. Min.
1.....	Inches	77.2	68.4	76	e.	7	k	9		Inch.	89.8 71.8
2.....	30.05	77.2	68.4	76	e.	7	k	9		0.26	89.8 71.8
3.....	30.04	78.4	66.0	67	ese.	7		0		0.12	90.5 70.0
4.....	30.04	76.5	67.5	75	0	k		1	ws.	0.00	91.8 70.9
5.....	30.01	77.0	68.2	76	e.	4	s	0	e.	0.00	91.0 73.7
6.....	30.02	77.0	68.2	76	e.	2		0		0.00	90.0 72.3
7.....	30.04	77.0	68.5	65	e.	11		0		0.25	90.5 70.3
8.....	30.02	76.1	65.8	72	e.	7		0		0.00	91.4 68.5
9.....	29.98	77.9	69.3	76	e.	2	ck	1		0.00	93.2 71.1
10.....	29.96	81.8	69.4	69	ese.	11	s	2	e.	0.00	93.6 75.0
11.....	30.00	80.6	70.9	74	e.	11	cs	1		0.00	94.5 75.2
12.....	30.02	79.3	67.3	68	e.	7	s	1		0.00	93.6 71.6
13.....	30.00	80.6	64.0	59	e.	11	sk	1	sw.	0.00	94.6 74.8
14.....	30.00	79.9	59.9	52	e.	9		0		2.34	96.4 75.2
15.....	29.94	79.0	70.9	78	ese.	7		1		0.15	92.1 73.0
16.....	30.03	79.2	69.1	72	e.	7		0		0.02	90.3 71.8
17.....	30.10	78.1	67.1	70	e.	2	ck	4		0.38	92.8 71.4
18.....	30.08	74.3	66.9	79	e.	2	c	10	w.	1.12	91.6 68.7
19.....	30.03	74.1	71.8	93	0	ck; k	9	9	w.	0.00	88.2 70.7
20.....	30.04	76.5	70.2	82	e.	4	ck	7		0.00	91.4 72.1
21.....	30.05	77.9	63.3	62	e.	4		0		1.15	91.9 69.8
22.....	30.06	77.4	68.2	74	se.	9		0		0.27	88.3 68.2
23.....	30.01	75.9	67.5	76	0	cs	7	7	w.	0.66	91.2 69.6
24.....	29.95	77.0	72.5	87	e	7	c	10	w.	0.92	86.7 71.2
25.....	29.91	75.7	72.1	89	se.	2	ck	7	w	0.00	84.4 71.4
26.....	29.93	75.6	73.9	95	0	n	10	10		0.63	80.2 74.1
27.....	29.87	73.4	72.5	97	0	n	10	10	s.	0.59	84.7 73.1
28.....	29.92	75.9	74.8	96	0	n	10	10		0.00	88.3 73.2
29.....	30.00	78.1	74.8	90	ene.	4	k	6	hsw. } ssw. }	1.70	91.2 74.3
30.....	30.04	78.1	74.3	89	0	s	1	1		0.00	91.4 73.6
31.....	30.04	76.6	76.1	98	ese.	2	k	1		0.17	91.6 73.6
31.....	29.98	77.0	73.8	90	0	ck	4	4	wnw.	1.19	91.0 72.1
Sum.....										11.90	
Means.	30.00	77.4	69.3	78.1	4.0			3.7		90.6	71.9

n = nimbus.